

# APPENDIX 18

## Louisville Metro Hazard Mitigation Action Plan

**May 2005**

### Louisville Metro Hazards Mitigation Goals

Goal 1—Minimize the loss of life and injuries that could be caused by natural hazards.

Goal 2—Facilitate a sustainable economy by protecting agriculture, business, and other economic activities from natural hazards.

Goal 3—Facilitate the strengthening of public emergency services, its infrastructure, facilities, equipment, and personnel to natural hazards.

Goal 4—Develop a community-wide mitigation effort by building stronger partnerships between government, businesses, and the general public.

Goal 5—Increase public and private understanding of natural hazard mitigation through the promotion of mitigation education and awareness of natural hazards.

Goal 6—Enhance existing or design new policies and technical capabilities that will reduce the effects of natural hazards.

Goal 7—Enhance existing technical and GIS data and capabilities that will reduce the effects of natural hazards.

The following mitigation actions vary in their objective to mitigate according to the 7 goals. Note that many of the actions are geared toward protecting existing structures and infrastructure, while others mitigate new and future planning and infrastructure, and still others are geared toward education and public outreach.

Note: "NOB" indicates an internal agency effort via Normal Operating Budget resources

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
s	<b>Develop Cellular phone service emergency warnings</b> - Send out mass text messages for emergency warnings -- Inform people about the availability of this service by their provider - Research other communities who have already implemented	EMA (Jim McKinney)	Cell Companies LEPC MetroSafe	2005 to research  2007 to implement	TBD	Percentage of cell coverage	C
s	<b>To develop a strategy for protecting existing buildings/infrastructure:</b> Collect and Assemble building values. Data to reside in LOJIC system for: <input type="checkbox"/> Public facilities <input type="checkbox"/> Hospitals <input type="checkbox"/> Parochial and private schools <input type="checkbox"/> Non-profits <input type="checkbox"/> Local, state, and federal	PVA	Metro Facilities KY Educ. Dept. KY Div. Health Care U.S. agencies LOJIC	2006	Resources needed	Collected data	A
s	<b>To develop a strategy for protecting existing buildings/infrastructure:</b> <b>Collect Additional Enhanced Data for Publicly owned buildings and facilities</b> Develop a central spatial database of all publicly owned buildings and facilities. Data to reside in LOJIC system	Metro Facilities	LOJIC PVA	2005	NOB	Spatial database	A

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
s	<b>All Hazards Information Portal</b> For educational and public outreach: Develop Standardized Seasonal "Fact Sheets" <ul style="list-style-type: none"> <li>• Message to be consistent for ARC, Health Dept., EMA, LGE, Dept. of Educ, etc...</li> <li>• Develop a seasonal section for teachers and citizens</li> <li>• Metro Call could help drive data collection and promote information</li> </ul>	MSD (Randy Stambaugh) EMA (Jim McKinney)	All agencies ARC Health Dept. EMA LGE JCPS Metro Call LOJIC	2006 - 2007	Grant in place	Operating portal	C
s	<b>To develop a strategy for protecting existing buildings/infrastructure:</b> <b>All Hazards Information Portal</b> - Track and share data on hazard occurrences and damage costs -- Database and upload function for agency use from All Hazard portal	MSD (Randy Stambaugh) EMA (Jim McKinney)	All agencies	2006	Grant in place	Operating portal	B
s	<b>Public education &amp; standard public statements for All Hazards</b> <ul style="list-style-type: none"> <li>• Develop a standard message and education strategy for pre and post-disaster messages. E.g.               <ul style="list-style-type: none"> <li>○ Boil water advisories</li> <li>○ Where shelters are located</li> <li>○ When streets will be cleared</li> <li>○ When electricity will be back on</li> </ul> </li> <li>• Promote:               <ul style="list-style-type: none"> <li>○ Availability of hazard insurance, e.g., flood, earthquake, etc</li> <li>○ Severe storm month</li> </ul> </li> <li>• Utilize recording by MetroCall to disseminate brief information on hazards</li> </ul>	Public Information and Outreach Committee	ARC JCPS NWS EMA MetroCall Metro/Suburban Fire KYEM Area 6 Health Dept MSD USGS Metro Police Corps of Engineers	2006	NOB	Standard Message	C
ee	<b>To develop a strategy for protecting lives, existing, new and future buildings/infrastructure:</b> <b>Verify GIS locations for existing state dams</b>	LOJIC (Curt Bynum)	KY DOW MSD NRCS Metro/Suburban Fire Districts Metro Parks	2005	NOB	GIS locations	A
ee	<b>To develop a strategy for protecting lives, existing, new and future buildings/infrastructure:</b> <b>Class C, High-Hazard Dams</b> <ul style="list-style-type: none"> <li>• Ensure all Class C dams have and maintain an Emergency Operations Plan (EOP)</li> <li>• Verify downstream warning system, public notice, etc. are included in EOP.</li> </ul>	MSD (Vince Bowlin)	KY DOW Metro Parks Dam owner	2005	NOB	If not at state – do locally	A
ee	<b>To develop a strategy for protecting lives, existing, new and future buildings/infrastructure:</b> <b>Develop a local inventory of all dams</b>	MSD (Vince Bowlin)	Metro PW LOJIC	2006	NOB	Inventory	B
ee	<b>Inventory of dams in local Metro parks</b>	Metro Parks (Bill Herron)	MSD LOJIC	2005	NOB	Inventory	B
ee	<b>To develop a strategy for protecting existing, new and future buildings/infrastructure:</b> <b>Develop Dam inundation models</b>	MSD (Vince Bowlin) LOJIC (Curt Bynum)	Corp of Engineers KY DOW LOJIC	2008	TBD	Modeling	A
ee	<b>To develop a strategy for protecting existing buildings/infrastructure:</b> <b>Collect types of dam materials</b>	MSD (Vince Bowlin)	Corp of Engineers Metro Parks KY DOW LOJIC	2006	NOB	Catalogue materials	A
ree	<b>To develop a strategy for protecting existing buildings/infrastructure:</b>	Metro Parks (Bill Herron)	KYDOW Dam owner	2005- 2007	NOB	- Inspection criteria and	A

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
	<b>Develop better local dam construction and inspections criteria</b> In order of the following: <ol style="list-style-type: none"> <li>1. Develop inspection and construction criteria to review existing dams – adopt in Land Development Code</li> <li>2. Inspect dams to develop a report</li> <li>3. Determine if dam classifications are out-of-date</li> <li>4. Require dam owner to maintain EOP and annual drills</li> </ol>	Herron)  MSD (Vince Bowlin)	EMA Corp of Engineers PDS			updated classifications - Adopted in Land Development Code	
ee	<b>To develop a strategy for protecting lives, existing, new and future buildings/infrastructure: Consider requiring EOP for Class B dams</b>	KY DOW Dam Safety Program	MSD Metro Parks Dam owner LOJIC	2006	NOB	EOPs	B
ee	<b>To develop a strategy for protecting lives, and existing, new and future buildings/infrastructure: Removal and replace unsafe dams</b> Once inspections are complete, the list of unsafe dams will determine next steps for repair and/or remove dams	Metro Parks (Bill Herron)  MSD (Vince Bowlin)	KYDOW NRCS Dam owner LOJIC	2005/06	Metro Parks MSD Capital Projects NRCS	# of dams removed or repaired	A
ee	<b>To protect existing, new and future buildings/infrastructure: Develop a local dam permitting process</b> For dams that do not fit the state's definition of a dam. Adopt process in codes.	Metro Parks (Bill Herron)  MSD (Vince Bowlin)	KYDOW EMA PDS IPL	2005	NOB	Permit process	A
ee	<b>To protect existing, new and future buildings/infrastructure: Place a benchmark or similar point on dams to determine if movement is occurring</b> <ul style="list-style-type: none"> <li>▪ Benchmark placement should coincide with inspection and data development</li> </ul>	Metro Parks (Bill Herron)  MSD (Vince Bowlin)	KYDOW Dam owner EMA Corp of Engineers PDS LOJIC	2006	Approx. \$1500 per dam	# of dams with benchmarks and signs installed	B
ee	<b>To protect existing buildings/infrastructure: Post a sign/landmark on dams with classification type (A, B, or C).</b> Signs to include: <ul style="list-style-type: none"> <li>• A description of materials</li> <li>• Potential for movement</li> <li>• Contact numbers</li> <li>• Description of different types of things to look for when a dam fails</li> </ul>	Metro Parks (Bill Herron)  MSD (Vince Bowlin)	KYDOW Dam owner EMA Corp of Engineers LOJIC	Strategy in 2005	TBD	# of dams with signs /landmarks installed	C
ee	<b>To protect existing buildings/infrastructure: Evaluate damage to levee and flood protection system</b> Primarily Ohio River Flood Protection System and large pump stations (i.e. Beargrass Creek)	MSD (Vince Bowlin)	Corps of Engineers LG&E	Ongoing with no end date	MSD funded; estimated at \$2.2 million/yr. (\$38 million Total Est. Cost)	# of facilities evaluated and rehabilitated	A
	<b>To protect existing, new and future buildings/infrastructure: Need a central local agency or avenue to report and receive info</b> <ul style="list-style-type: none"> <li>• Link to All Hazards Portal</li> <li>• Need to collect loss of Agricultural, economic #s, water supply</li> </ul>	EMA & MSD (All Hazards Portal)	All Agencies LEPC	2006	TBD	Information gathered & Information Disseminated	B
	<b>Drought damage and education –</b> Outreach and education should include <ul style="list-style-type: none"> <li>• WHEN Drought occurs</li> <li>• How do we keep the public informed</li> </ul>	EMA (Jim McKinney)  Public Health (Bill Wetter)	NRCS Metro Call LWC All Hazard Portal	2006	TBD	Information gathered & Information Disseminated	C

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
	<ul style="list-style-type: none"> <li>Agricultural extension could help keep track of this information</li> </ul>						
	<b>To protect existing, new and future buildings/infrastructure:</b> <b>Partner with State's Drought task force (Water Availability Advisory Committee) to</b> <ul style="list-style-type: none"> <li>Track and deal with issues</li> <li>Assess statewide and local impacts</li> <li>Contact Tom Priddy, U of K, who does Drought research</li> </ul>	NWS-- Mike Callahan	NWS KGS Corp of Eng State Climatologists NRCS	2005	NOB	Information gathered & Information Disseminated	C
	<b>To protect existing buildings/infrastructure:</b> <b>Public education: Foundations cracking in extreme drought</b> Promote public awareness, soil shrinkage can lead to cracking in foundations – solutions are to water the lawn and the foundation	EMA (Jim McKinney)	NRCS All Hazards Portal MetroCall	2005	NOB	Information gathered & Information Disseminated	C
e	<b>To protect lives and existing, new and future buildings/infrastructure:</b> <b>Develop Enhanced soils data to determine liquefaction</b> Need better soils data, esp. for downtown/urban area	NRCS (Kurt Mason)	USGS KGS LOJIC Corp of Engineers Local geotechnical, architectural & building firms	2008	Resources needed	Collected soils data	B
e	<b>To protect existing buildings/infrastructure:</b> <b>Collect Additional Enhanced Building Data</b> <ul style="list-style-type: none"> <li>Need year built, especially structures older than 1980</li> <li>Need type of foundation and building construction type</li> </ul>	PVA	LOJIC Fire Inspections Police Metro Facilities Health Dept. Local Hospitals	2007 - 2008	Resources needed	Collected data	A
e	<b>Earthquake preparedness &amp; Public Outreach</b> <ul style="list-style-type: none"> <li>Consider a Public Information Officer for all hazard committee</li> <li>Develop standard message for Media</li> <li>Research and distribute new KY EM Guide produced by the state</li> </ul>	EMA (Jim McKinney)  KY EM (Steve Ogelsby, EQ director)	EMA ARC JCPS Media All Hazards Portal MetroCall	2006	TBD	Information gathered & Information Disseminated	C
e	<b>To protect lives and existing, new and future buildings/infrastructure:</b> <b>Location of existing fault lines</b>	KGS	LOJIC	2005	NOB	Locations	B
e	<b>To protect existing buildings/infrastructure:</b> <b>Inventory Hospital underground wells</b> Data is with Metro Public Health	Public Health (Bill Wetter)	Metro Public Health Local Hospitals LOJIC	2005	NOB	Locations	B
e	<b>To protect existing buildings/infrastructure:</b> <b>Target Public buildings for retrofit</b> <ul style="list-style-type: none"> <li>Once inventory of public building is completed (LOJIC), target earthquake-prone structures</li> <li>Develop standard for structural sound and asset tie-down (i.e. heavy bookcases, equipment)</li> <li>Promote purchase of earthquake insurance</li> </ul>	Metro Facilities Mgmt	Metro PW LOJIC JCPS Libraries Structural Committee	2008	TBD  Need grant funding	# of buildings retrofitted	A
eat	<b>Need a central local agency or avenue to report and receive info for extreme heat</b> Link to All Hazards Portal	EMA & MSD (All Hazards Portal)	LEPC Police Fire NWS Health Department Metro Call	2006			B

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
eat	<b>Collect standard damage reports</b> Reports come from NWS & Public Health	EMA (Jim McKinney)	NWS Public Health JCPS LEPC	2005	NOB	Report system in place	D
eat	<b>Partner with existing Extreme Weather Group</b> Group makes projections of how long the weather will continue and directs the opening of cooling centers.	NWS (Mike Callahan)	NWS	2005	NOB	Partnership	C
	<b>Regulations to protect existing, new and future buildings/infrastructure:</b> <b>Enforce Floodplain Ordinance Regulations</b> - Especially for repetitive loss	MSD (Randy Stambaugh)	EMA	2005	NOB	Reduce repetitive loss	A
	<b>To protect existing buildings/infrastructure:</b> <b>Map Repetitive Loss properties</b> <ul style="list-style-type: none"> <li>Use NFIP insurance claims as basis</li> <li>Expand repetitive loss sites to vulnerable "area"</li> </ul>	LOJIC (Curt Bynum)	MSD	2005	NOB	Map	A
	<b>Project to protect existing, new and future buildings/infrastructure:</b> <b>Woodland Manor Basin</b> Project involves the construction of a 38 acre-feet basin at the confluence of Fishpool Creek and Southern Ditch in the Pond Creek Watershed. This basin will benefit local roads and residential properties in the Woodland Manor neighborhood that are particularly susceptible to frequent flood damage.	MSD (Randy Stambaugh)		2006, if funded	PDM grant application is being reviewed by state, FEMA region, and National Review Committee	Basin	B
	<b>Project to protect existing, new and future buildings/infrastructure:</b> <b>Aganza Basin</b> Project involves the construction of an 860 acre-feet basin within the Pond Creek Watershed. This basin will benefit local roads, homes, and businesses that are particularly susceptible to heavy flood damage due to development within this former swampland.	MSD (Randy Stambaugh)		2006, if funded	PDM grant application is being reviewed by state, FEMA region, and National Review Committee	Basin	B
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Collect Building first floor elevations</b> <ul style="list-style-type: none"> <li>Use data to model at-risk structures</li> <li>Cost could be significant depending on the # of elevations</li> <li>Will require contractors</li> </ul>	MSD (Randy Stambaugh)	LOJIC	2007	TBD, possibly grants	Completed elevations	B
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Map Modernization and D-FIRM (digital Flood Insurance Rate Map)</b> Information will provide better data for update to plan	MSD (Randy Stambaugh)	LOJIC	2006	Grant in place	Completed Map Mod	A
	<b>Project to protect existing buildings/infrastructure:</b> <b>Target public buildings damaged by flood for retrofit</b> <ol style="list-style-type: none"> <li>Inventory public buildings at risk from flood</li> <li>Develop strategy to ensure buildings are floodproofed/retrofitted</li> <li>Target flood-prone</li> </ol>	MSD (Randy Stambaugh)  LOJIC (Curt Bynum)	Metro PW Metro Facilities JCPS Libraries Metro Facilities Mgmt	2005	NOB for inventory and strategy Grants for retrofit	Inventory Strategy # of buildings protected	A
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Review and update High Water Emergency Plans</b>	MSD (Vince Bowlin)	Corp of Engineers EMA Mayor's Office Metro PW	2006	NOB	Plans in place	A
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b>	Corp of Engineers (Richard Pruitt)	MSD EMA	2006	NOB	List of Emergency	A

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
	<b>FWEPS (Flood Warning and Emergency Evacuation Plans).</b> <ul style="list-style-type: none"> <li>Review locations and number of existing plans</li> <li>List all locations and plans and make available to public agencies</li> </ul>		KYDOW Metro PW Metro Police Metro/Suburban Fire			Response Actions and Post-Flood Recovery Plans	
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Determine if additional FWEPS are needed</b> Develop FWEPS for areas not included in the List of Emergency Response Actions and Post-Flood Recovery Plans	MSD	USACE	2007	Grants	New Emergency Response Actions and Post-Flood Recovery Plans Developed	A
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Review Flood Warning Gauges and effectiveness</b> USGS proposes a web-based project to feed early warning program. Project would include developing flood tracking charts/ flows interactive and use of flood inundation mapping. Gauges could be phased.	USGS (Mike Griffin)	EMA MSD NWS	Phased	Estimate \$200K to begin project  Need grant funding	# of gauges	B
	<b>Outreach Projects</b> <ul style="list-style-type: none"> <li>Partner with KY Weather Preparedness Committee (KWPC)</li> <li>Promote the existing national FLASH program</li> <li>Promote "Turn around and don't drown".</li> <li>Include message for No Dumping of Debris in ditches.</li> </ul>	NWS (Mike Callahan)  EMA (Jim McKinney)	All agencies All Hazards Portal KWPC	2006	TBD	Completed outreach & partnerships	C
	<b>Project to collect info to protect existing buildings/infrastructure:</b> <b>Develop program for Non-profit retrofitting</b> Investigate non-profit/humanitarian home building entities for low-income floodproofing /retrofitting projects in a floodprone area.	All Hazard Committee	Corporate sponsors All agencies	2009	Dependent on donations or grant	# of building protected	B
	<b>Project to collect info to protect existing buildings/infrastructure:</b> <b>Develop a plan to identify potential candidates for buyouts or assistance from disaster agencies.</b> Components may include: <ul style="list-style-type: none"> <li>Identify funding alternatives</li> <li>Coordination with disaster assistance agencies to ensure efficient use of funds</li> <li>Define/prioritize potential acquisitions</li> </ul>	MSD (Randy Stambaugh)	EMA KYEM	2006 for a plan	Acquisition may depend on Grants  Capital Improvements Budget	# of building protected	B
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Slope Stabilization</b> Erosion and Sediment Control	MSD	KYDOW	2005	MSD Capital Projects	Acreage of slopes stabilized	B
	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Develop strategy and solutions for Individual Properties with Flooding Problems</b> <ol style="list-style-type: none"> <li>Develop strategy</li> <li>Target and evaluate properties that do not fit into traditional projects</li> <li>Develop potential solutions both on an individual and watershed level.</li> </ol>	MSD (Randy Stambaugh)	Louisville Metro EMA Corps of Engineers KYEM	2006 – 2007 for strategy	Acquisition depends on Grants	# of building protected	B
oles	<b>Project to collect info to protect existing, new and future buildings/infrastructure through regulations:</b> <b>Need a central local agency or avenue to report and</b>	PDS)	PDS Planning Commission	2006	NOB	Review agency in place	B

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
	receive info for karst/sinkhole Recommend development of karst and landslide review component in a new "overlay district"		Metro PW				
oles	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Define plan review overlay districts</b> <ul style="list-style-type: none"> <li>Base on census tracts at risk from karst</li> <li>Incorporate into MIDAS</li> </ul>	Metro Planning Design Services	Metro Parks Olmstead Conservancy MSD NRCS KGS LOJIC IPL	2005	NOB	Overlay Districts formed	A
oles	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Recommend local codes for karst regulations</b> <ul style="list-style-type: none"> <li>Research what has been looked at in the past</li> <li>New regulations to be addressed in Land Development Code</li> </ul>	Metro Planning Design Services	Metro Parks Olmstead Conservancy MSD NRCS KGS LOJIC IPL	Research in 2005  2006 passage	NOB	Adopted in Land Development Code	A
oles	<b>Project to develop a project to protect existing, new and future buildings/infrastructure: Dye-Tracing in sinkholes</b> Conduct dye-tracing to assess critical sinkholes and subsurface ground water impacts	Metro Planning MSD KGS	Metro Parks LOJIC	2007	Resources needed	Inventory	B
oles	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Sinkhole inventory in Louisville Metro Parks</b>	Metro Parks (Bill Herron)	Olmstead Conservancy LOJIC	2006	NOB	Inventory	B
oles	<b>Project to develop strategy to protect existing, new and future buildings/infrastructure: Collect better karst/sinkhole soils data</b> <ol style="list-style-type: none"> <li>Research/develop soils data in census tracts at risk from landslide</li> <li>Incorporate into MIDAS</li> </ol>	NRCS (Kurt Mason)	USGS KGS LOJIC Corp of Engineers IPL Local geotechnical, architectural & building firms	2007	Resources needed	Soils data Strategy for targeted areas	B
oles	<b>Project to develop a strategy to protect existing, new and future buildings/infrastructure: Collect better building/facility data in karst census tracks</b> <ul style="list-style-type: none"> <li>Develop building data info</li> <li>Develop a strategy to target areas for outreach, regulations, retrofit, etc...</li> </ul>	Metro Facilities	PVA LOJIC IPL	2007	NOB	Data collected and strategy in place	A
oles	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Research hazard disclosure laws</b>	Board of Realtors	All agencies	2007	NOB	Report on law	C
oles	<b>Project to develop a project to protect existing infrastructure: Repairs to public park lands and facilities</b> Currently in place for Iroquois & Cherokee Parks	Metro Parks (Bill Herron)	MSD KYDOW Olmstead Conservancy LOJIC	2005 – 2006	Metro Parks funded – currently \$125K for Iroquois	Acreage of lands repaired	B
e	<b>Avenue to develop regulations to protect existing, new and future buildings/infrastructure: Need a central local agency or avenue to report and receive info for landslide</b> Recommend development of karst and landslide review component in a new "overlay district"	Metro PDS (Dennis Minks)	Metro PDS Planning Commission Metro PW	2006	NOB	Review agency in place	B
e	<b>Project to enforce current regulations to protect existing, new and future buildings/infrastructure:</b>	PDS	IPL	2005	NOB		B

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
	<b>Enforce Binding Elements</b> <ul style="list-style-type: none"> <li>To limit clearing of vegetation on high-risk slopes</li> </ul>						
e	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure:</b> <b>Define landslide plan review overlay districts</b> to limit development of high-risk slopes Base on census tracts at risk from landslide	Metro Planning Design	Metro Parks Olmstead Conservancy MSD NRCS KGS LOJIC IPL	2005	NOB	Overlay Districts formed	A
e	<b>Project to collect info to protect existing, new and future buildings/infrastructure:</b> <b>Develop soils data for landslide</b> <ol style="list-style-type: none"> <li>Research/develop soils data in census tracts at risk from landslide</li> <li>Incorporate into MIDAS</li> <li>Target areas</li> </ol>	NRCS (Kurt Mason)	Metro PW Metro PDS Metro Parks LOJIC IPL KGS USGS	2006	Resources needed	Data collected and strategy in place	B
e	<b>Project to protect existing, new and future buildings/infrastructure:</b> <b>Collect better building/facility data in landslide census tracks</b> <ul style="list-style-type: none"> <li>Develop building data info</li> <li>Develop a strategy to target areas for outreach, regulations, retrofit, etc...</li> </ul>	Metro Facilities	PVA LOJIC IPL	2005	Resources needed	Data collected and strategy in place	A
e	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure:</b> <b>Recommend local codes for landslide regulations</b> <ul style="list-style-type: none"> <li>Research what has been looked at in the past</li> <li>New regulations to be addressed in Land Development Code</li> </ul>	PDS	NRCS KGS LOJIC IPL Planning Commission	Research in 2005  2006 passage	NOB	Adopted in Land Development Code	A
e	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure:</b> <b>Consider hazard disclosure laws</b>	Board of Realtors	All agencies	2007	NOB	Report on law	C
e	<b>Project to protect existing, new and future buildings/infrastructure:</b> <b>Repairs and reforestation to public lands and facilities.</b> Currently in place for Iroquois & Cherokee Parks	Metro Parks (Bill Herron)	MSD KYDOW Olmstead Conservancy LOJIC	3 <sup>rd</sup> Qtr 2005 –2006	Metro Parks funded – currently \$125K for Iroquois	Acreage of lands repaired	B
m ds: S, ms, ms, and l	<b>Re-evaluate Outdoor Warning Sirens</b> Review number, locations, and capabilities of warning sirens to ensure adequate coverage.	EMA  (Jim McKinney)	LEPC	2005	EMA Capital Budget \$145K	Report and Percentage of coverage	C
m ds	<b>Outdoor Warning Sirens --- a requirement for new subdivisions</b> EMA is currently working with the development group to make Sirens a requirement for all new subdivisions.	EMA  (Jim McKinney)	PDS HBAL Developers LOJIC MSD	2005	NOB	Adopt in Land Development Code	C
m ds	<b>Promote &amp; Distribute Weather Radios</b> ARC work a grant w/ packet to the radio/corporate sponsor	ARC (George Betz)	NWS EMA Corporate sponsors	2006	Approx \$10K  Requires funding  Grants	# of radios	C

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
m rds	Partner with the Home Builders Association to develop a program for pre-Built in weather radios <ul style="list-style-type: none"> <li>Identify the safest spot in the house</li> <li>Develop an outreach pkg for new homeowner</li> </ul>	NWS (Mike Callahan)	HBAL Developers ARC	2006 to begin partnership	HBAL  Consumer	Partnership	B
m rds	Project to protect lives, and existing, new and future buildings/infrastructure: Requiring or at least encouraging safe rooms/safe places in Manufactured Housing parks						A
m rds	Project to protect lives and existing buildings/infrastructure: Promote Safe Rooms <ul style="list-style-type: none"> <li>Encourage new construction to include a safe room</li> <li>ARC work with the HBAL to build safe rooms</li> <li>Study other communities to see what they have done</li> </ul>	ARC (George Betz)	Insurance Co. HBAL EMA	2006 - 2008	Safe rooms cost approx \$5K Grants	# of safe rooms	A
m rds	Project to protect existing, new and future buildings/infrastructure: Public Outreach on retrofitting and wind-driven building techniques <ul style="list-style-type: none"> <li>Standardize message and program for how to make a home wind resistant</li> <li>Promote existing Blueprint for Success Flash.org</li> <li>KY Weather Preparedness Committee is working to buy FLASH cards</li> </ul>	NWS  ARC  EMA	HBAL NWS ARC EMA All hazards portal KWPC IPL	2006	NOB	Partnerships	C
m rds	Map historical tornado paths	NWS (Mike Callahan)	LOJIC	2005	NOB	Map	C
m rds	Project to protect existing buildings/infrastructure: Partner with insurance companies Help give premium reductions to people who have safe rooms or use other disaster-resistant techniques.	KY Dept of Insurance	Insurance Co LEPC	2007	NOB	Reduction in premiums	D
m s	Project to protect existing, new and future buildings/infrastructure: Hurricane Clips <ul style="list-style-type: none"> <li>Require hurricane clips through the State Building Code – currently not required.</li> <li>Develop a petition, signed by Louisville and Lexington, for amendment to state Bldg Code</li> <li>Code Plus issue – market HBAL for hurricane clips and safe houses</li> </ul>	All Hazards Committee	HBAL NWS EMA ARC IPL KYEM KWPC LOJIC	2006	NOB	Adopted in State Building Code	A
m rds	Project to protect existing, new and future buildings/infrastructure: Assessment of public buildings <ul style="list-style-type: none"> <li>Target structures that may need protection or roof repair</li> <li>Develop program to retrofit</li> </ul>	Metro Facilities Mgmt	PVA LOJIC IPL Structural Committee	2007	NOB	# of buildings assessed	B
m rds	Project to protect existing, new and future buildings/infrastructure: Research Minimum shingle type in codes/regulations	IPL (Robert Kirchdorfer)		2007	NOB	Report	D
m rds	Develop a grant for “severe storm trailers” for the Fire Department to take to schools	Suburban Fire District (Joe Johnson)	JCPS	2006	Grant	Purchase of trailer	C
m rds	Expand Weather Spotter Program	NWS (Norm Reitmeyer)	CERT EMA ARC Police Metro/Suburban	2005	NOB	# of spotters	C

	Type of Activity or Project	Lead Implementer & Contact Person	Other Proposed Partners	Proposed Schedule	Funding/ Budget Considerations	Performance Measure	Priority
			Fire Districts TARC JCPS				
m rds	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Develop a Tree Ordinance</b> Metro Parks and other government agencies are developing a community-wide Tree Ordinance.	Metro Parks – Bill Herron	Metro Parks Metro PW LOJIC	TBD			A
m rds	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Tree trimming and power line maintenance</b> Pro-Active plan before severe weather	LG & E (Keith McBride)	Metro Parks Metro PW		Primarily LG&E funded; supported by Parks and Public Works maintenance	Reduction in average annual power outages	B
m rds	<b>Loss of Power-</b> <ul style="list-style-type: none"> <li>Promote LGE plans and target community expectations</li> <li>Increase outreach through ARC and JCPS during power outages</li> <li>Develop cross Information management</li> </ul>	LG & E (Keith McBride)	ARC Public Health IPL EMA JCPS Metro PW Police Metro/Suburban Fire Districts All hazards Portal	2005 - 2006	NOB	Reduction in average annual power outages	B
	<b>Project to protect existing, new and future buildings/infrastructure: Develop standard for reporting grass, wild fire, etc....</b>	Metro Fire (Al Tronzo) Suburban Fire (Joe Johnson)	EMA	2005	NOB	Consistent reporting	C
	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Acquire and deed restrict forested land</b> e.g. Jefferson Memorial Forest, greenways, and parks	Metro Parks (Bill Herron)	MSD Louisville Metro New and future Fund LOJIC	Ongoing	NOB Capital budget Acquisition depends on Grants	Acres purchased/ acquired	B
	<b>Project to develop regulations to protect existing, new and future buildings/infrastructure: Develop strategy for fire suppression</b> <ol style="list-style-type: none"> <li>Collect national fire data</li> <li>Map areas</li> <li>Target wildfire census tracts</li> </ol>	Metro Fire (Al Tronzo) Suburban Fire (Joe Johnson)	EMA LOJIC	2005	NOB	Strategy & Implementation plan	B

Note: "NOB" indicates an internal agency effort via Normal Operating Budget resources